Historic, Archive Document

Do not assume content reflects current
scientific knowledge, policies, or practices.

A280.9
Ag83
Copy 2

SRS-12

HOMEMAKERS' OPINIONS ABOUT SELECTED MEATS

A Preliminary Report

U. S. DEPT. OF AGRICULTURE
NATIONAL AGRICULTURAL LIBRARY
APR 10 1968
CURRENT SERIAL RECORDS

U.S. Department of Agriculture
Statistical Reporting Service

PREFACE

This report presents preliminary results based on the first-quarter interviewing of a year-long study which was designed to analyze consumers' attitudes and opinions about selected meats and meat products.

The Statistical Reporting Service assumed major responsibility for the study, with coordination and advice from other services in the Department. The National Live Stock and Meat Board provided technical assistance on behalf of the meat industry and also contributed toward the cost of the project.

The data were collected and tabulated by National Analysts, Inc., Philadelphia, Pa., under contract with the U.S. Department of Agriculture.

CONTENTS

	Page
Summary	iv
Introduction	1
Use of Specific Meats or Meat Products	2
Meat Purchasing Practices	7
Inspection and Grading	8
Meat Freezing	13
Meat Preparation	14
Some Factors Affecting the Use of Meats	16
Comparison of Specific Meats in Relation to Selected Characteristics	18

Washington, D.C. March 1968

SUMMARY

When homemakers compare beef, chicken, smoked or cured pork (ham), and fresh pork, they consider beef the most satisfactory--both in general characteristics and in particular cuts for specific situations.

This was a major preliminary finding in a survey of homemakers' opinions on and attitudes toward those meats. This finding may help explain why almost all homemakers reported serving beef in the 12 months preceding the interview, and why it was consumed more frequently than other meats during the year. Chicken, the next most frequently eaten meat, was considered the second most desirable meat by consumers. Ham, which was reportedly eaten less frequently than beef and chicken, was considered desirable in fewer situations than beef and chicken and did not score as well on particular characteristics. Ham did, however, project a more positive image than fresh pork; the only favorable attributes homemakers gave to fresh pork were tastiness and the fact that one form (pork chops) was not considered difficult to prepare.

Homemakers' complaints about meat in general focused on packaging. The most frequent complaints were directed at their inability to see the amount of waste--specifically fat or bone--in a package.

The functions of USDA grading and inspection were not altogether clear to the respondents. Many assumed that the functions of grading included those of inspection, and vice versa. Some homemakers also assumed that meat grading applies to more kinds of meat than it actually does.

HOMEMAKERS' OPINIONS ABOUT SELECTED MEATS

A Preliminary Report

By

Margaret Weidenhamer, Edward M. Knott, and Lorna R. Sherman 1/

INTRODUCTION

This is a preliminary report, based on first-quarter interviewing conducted in February and March 1967, of a year-long study of consumer attitudes toward meat. The report provides preliminary findings for many of the questions asked in the survey. Although analysis of the final results will include interpretation of data by such factors as respondents' income and education levels, age, family size, frequency of meat usage, etc., no attempt has been made to analyze findings in this report by these factors because of the relatively small sample size. Therefore, minor changes in interpretation may occur because of additional data collected in the spring, summer, and fall quarters or from detailed analysis of the data.

The study focuses on opinions about beef, fresh pork, ham, and chicken, and certain cuts of these meats. Although questions concerning the frequency of use of these and other meats are included, they were mainly designed to place respondents into appropriate usage groups to help interpret the attitude questions.

No attempt was made to verify respondents' definitions of particular meats or cuts, or their claims of how often they serve these meats. Such topics, then, are subject to both respondent interpretation and memory bias. The reader who wishes detailed information about amount of meat consumption is referred to the 1965-66 Household Food Consumption Study conducted by USDA. A report including some information on meat consumption has been published by the Consumer and Food Economics Research Division, ARS, USDA: Food Consumption of Households in the United States, Spring 1965. U.S. Dept. Agr., Household Food Consumption Surv. 1965-66 Rpt. 1.

The findings in this report are based upon interviews conducted in private households in both rural and urban areas throughout the United States, excluding Alaska and Hawaii. These households were selected by area probability sampling procedures, and, as in all sampling surveys, the data are subject to sampling error. An eligible household for this study was defined

---

1/Miss Weidenhamer and Mr. Knott are with the Special Surveys Branch, Standards and Research Division, Statistical Reporting Service, U.S. Department of Agriculture. Mrs. Sherman is with National Analysts, Inc. Philadelphia, Pa.

as one in which either meat or chicken was currently served. Of the 930 eligible households contacted, 776 yielded interviews, a completion rate of 83.4 percent.

The eligible respondent was defined as the person in a household with principal responsibility for the purchase (preferred respondent) or preparation (second choice) of meat. The term "homemaker" is frequently used to refer to the respondent, although it would be possible, by the definition of respondent, for someone other than a woman to be an eligible respondent.

The base for all tables in this report is the total number of respondents (776), unless otherwise indicated. Some of the questions allowed for multiple replies by respondents, so percentages in some tables may add to more than 100 percent. On the other hand, some percentages may add to less than 100 percent in tables where only the more pertinent findings are presented; similarly, percentages of some items may add to less than the percentage of the category heading for the same reason. The wording in the tabular material in this report follows the style of the questionnaire.

USE OF SPECIFIC MEATS OR MEAT PRODUCTS

Meats Reportedly Served in the Past 12 Months

Almost all homemakers reported that both beef and chicken had been served in their households during the 12 months preceding the interview. Although many respondents also reported serving bacon and fresh pork, these meats were generally served less frequently than beef or chicken.

At the beginning of the interview, respondents were presented with a list of specific meats and cuts and were asked:

> "As far as you can remember, which of these meats or meat products were served (in your home) in the past month?"

For each meat not mentioned, respondents were asked:

> "In the past 12 months, was (MEAT) served in your home?"

As explained in the introduction, these questions were designed primarily to place respondents into response categories to determine the appropriate attitude questions to be asked (and later, analytical groups). These questions were also designed to establish rapport with the respondent, to focus on the subject matter of the interview, and to provide some information about usage of specific meats and meat products not pursued in greater depth during the interview. Table 1, on page 24, shows the sum of responses to these questions.

Comparative Frequency of Serving Beef, Chicken, Pork, and Lamb

Beef and chicken, which were reported as being used by the largest percentage of homemakers, were also reported served with greater frequency than fresh or cured pork (except bacon) and lamb. For these meats, respondents were asked:

> "Which phrase on this card shows how often, on the average, (MEAT) was served in your home during the past 12 months?"

Response categories have been combined in the summary table following. It should be noticed that the questions referred only to frequency, and not to quantity, meal for which served, and whether the meat was or was not the main course.

Usual frequency of serving	Beef	Chicken	Bacon	Fresh pork	Smoked or cured pork	Lamb
	Percent					
More often than once a month	97	83	83	61	37	10
Once a month or less	3	15	11	30	50	18
Not at all in past twelve months	*	2	6	9	13	72
Total, each column	100	100	100	100	100	100

* Less than 1 percent

Use of Beef and Specific Beef Cuts

Over 90 percent of all homemakers reported serving some form of beef at least once a week. Ground beef was claimed to be the type of beef most frequently served, followed by steak of some kind (as defined by the respondent), oven roast, and pot roast.

Usual frequency of serving	Ground beef	Steak	Oven roast	Pot roast
		Percent		
Two or more times a week	45	19	2	4
About once a week	32	32	15	14
Two or three times a month	12	19	22	19
About once a month	7	11	20	21
Less often than once a month	2	14	21	18
Not at all in past twelve months	2	5	20	24
Total, each column	100	100	100	100

Use of Chicken

Almost as many homemakers said they had served chicken in the past 12 months as said they served beef, but claimed to have served chicken less frequently. Only 58 percent of the respondents said they usually served chicken at least once a week.

Usual frequency of serving chicken	Percent
Two or more times a week	15
About once a week	43
Two or three times a month	25
About once a month	10
Less often than once a month	5
Not at all in past twelve months	2

Use of Pork and Pork Products

Three categories of pork were included: bacon, other kinds of smoked or cured pork, and fresh pork. Of the three, bacon was served by most homemakers, followed by fresh pork and, lastly, smoked or cured pork.

Bacon, in addition to being used by more homemakers than other kinds of pork, was reported to be served most frequently. Over half of all respondents said they served bacon two or more times a week.

Usual frequency of serving bacon	Percent
Two or more times a week	58
About once a week	16
Two or three times a month	9
About once a month	5
Less often than once a month	6
Not at all in past twelve months	6

Fresh pork was reportedly used in 9 out of 10 of the households during the year; about one-third of the homemakers indicated that it was served as often as once a week on the average. Fresh pork was served most often as pork chops.

Usual frequency of serving	Pork chops	Pork roast	Spareribs
		Percent	
About once a week or more	28	3	4
Two or three times a month	27	9	10
About once a month	15	16	13
Less often than once a month	17	31	35
Not at all in past twelve months	13	41	38
Total, each column	100	100	100

Health reasons such as "hard to digest" and "doctor's orders" were mentioned most often by infrequent fresh pork users (once a month or less) as responsible for their infrequent use. Danger of trichinosis was not cited specifically as often as might have been anticipated--only 4 percent mentioned it. A lack of taste-appeal, cost, and grease or fat content were also mentioned, though to a lesser extent than health reasons. The patterns of responses among nonusers of fresh pork were similar to those outlined above.

Smoked or cured pork (other than bacon) was reportedly served by almost the same proportion of homemakers as fresh pork. It was, however, said to be served far less frequently than fresh pork; only about one-sixth served it as often as once a week. Ham (not canned) was the most frequently used of the smoked or cured pork products included in the questionnaire, and even this meat was used less frequently than once a month by a sizable percentage of the households reportedly serving it.

Usual frequency of serving ham	Ham (not canned)	Picnics	Canned ham
		Percent	
About once a week or more	7	2	2
Two or three times a month	14	5	4
About once a month	18	10	8
Less often than once a month	35	32	36
Not at all in past twelve months	26	51	50
Total, each column	100	100	100

No one reason stood out among those given by infrequent users (once a month or less) of hams or picnics. Reasons for infrequent use, such as price, preference, tiring of it quickly, difficulty in getting the size needed, and health reasons were each cited by about two or three in 10. The patterns of responses among nonusers of hams or picnics were similar to those outlined above.

Use of Lamb

Lamb was the least frequently used of all the meats investigated in this study. About one-fourth of the homemakers reported serving lamb in the past 12 months, and almost half of these users served it less often than once a month.

Usual frequency of serving lamb	Percent
Two or three times a month or more	10
About once a month	5
Less often than once a month	13
Not at all in past 12 months	72

Most nonusers said they didn't care for lamb, or had never acquired a taste for it. In addition, the opinion that lamb is expensive kept some from using it. Preference, price, and--to a lesser extent--nonavailability were the main reasons given for not using lamb more often than once a month.

Packaging

When respondents were given an opportunity toward the end of the interview to express in their own words any complaints they might have against meat in general, four out of 10 mentioned packaging practices as sources of irritation.

> "Many people say there are things they don't like so well about meat or the way it is sold. What don't you like so well? What else?"

The most frequently mentioned complaints that may apply to marketing practices were:

Complaints	Percent
Packaging	41
Preparing and handling	13
Freshness	11
Waste	10

Most of the complaints about packaging indicated possible deception in displaying the meat in the package with no way to observe characteristics of the contents, such as the proportion of fat or bone. The size of the portions in prepackaged meat--either too large or too small--was mentioned by a few respondents. In addition, price was mentioned by about one out of five homemakers; the same proportion indicated no complaints or criticism.

As mentioned above, dissatisfaction with meat packaging was the most frequent complaint about meat or the way it is sold. It would appear that much of the dissatisfaction was based on personal experience, rather than hearsay, since more than three-fourths of the respondents said they bought prepackaged meat.

> "Do you buy prepackaged meat, meat that is either cut or weighed out to order, or do you buy it both ways?" If "Both," "Which way do you usually buy it?"

	Percent	
Prepackaged only	27	
Both	55	
Mostly prepackaged		28
Equal		9
Mostly to order		18
To order only	17	
All other responses		

Price Specials

Approximately one-third of the respondents indicated that price specials were usually an important factor in determining their meat purchases. On the other hand, two in 10 said that price specials never played a part in determining what was bought.

"In buying meat, do you shop for 'specials' most of the time, some of the time, only once in a while, or never?"

	Percent
Most of the time	35
Some of the time	25
Only once in a while	20
Never	20

Desire to Learn More About Judging Meat

Respondents were asked which meats they would like to learn more about selecting. Although no one meat stood out among the responses, more homemakers expressed need for help in judging various cuts of beef (particularly steaks and oven roasts), fresh pork, and chicken. Little interest was shown in learning how to judge smoked or cured pork (including bacon) or lamb. Thirty percent of the homemakers expressed no interest in learning more about judging the meat they bought.

INSPECTION AND GRADING

Consumer Awareness of Inspection and Grading

There is reason to suspect that consumers are confused about inspection and grading of meat. Responses to a series of questions about inspection and grading indicated that, for some homemakers, the two terms are interchangeable; for others, elements of the function of one are included in the definition of the other. There are indications also that some homemakers may assume that all meats are graded.

Respondents were asked:

"As far as you know, is the meat you buy inspected, or isn't it?"

"As far as you know, is pork graded or not?"

"As far as you know, is beef graded or not?"

Replies were:	Is meat inspected?	Is pork graded?	Is beef graded?
		Percent	
Yes, it is	92	50	86
No, it isn't	*	6	1
Don't know, don't buy	8	44	13
Total, each column	100	100	100

* Less than 1 percent.

Homemakers who said that the meat they buy is inspected and those who said that beef is graded were asked who did the inspection and grading. Respondents generally attributed these functions to a Federal Government agency. A small percentage said that the packer or the store had these responsibilities. Grading was said to be the function of the store or packer more often than inspection.

	Inspection	Beef grading
	Percent	
U.S. Government	45	35
U.S. Department of Agriculture	28	29
Government (not further specified)	8	7
State government	6	4
Packer	5	10
Store or market	4	7
Don't know	17	17
	Number	
Respondents who said meat is inspected and beef is graded	715	670

Responses to questions: "How can you tell that meat has been inspected?", and "How can you tell that beef has been graded?", referred mainly to some kind of a stamp. Many homemakers mentioned a Government stamp or seal or a purple or blue stamp. Some mentioned a round or shield-shaped stamp or a grade name on a stamp. Such references were more often given as indicative of grading than of inspection.

	Inspection	Grading
	Percent	
Stamp (location references)	59	39
Stamp on meat	48	30
Stamp on package	7	8
Stamp (description references)	54	69
Government stamp or seal	34	22
Purple or blue stamp	26	50
Round or circular shape	6	17
Shield shape	2	6
Grade name on stamp	5	23
Stamp (unspecified references)	12	4
Reputation of store	9	4
Own ability to tell	2	13
By price	1/---	5
Amount of fat	*	3
By quality	1	3
Cut or area of carcass	1/---	3
Don't know	3	8
	Number	
Respondents who said meat is inspected and beef is graded	715	670

*Less than 1 percent.
1/ --- means zero in this sample.

Further indications of confusion for many consumers about the difference between these two functions were provided by homemakers' responses to the questions:

"What does this inspection (of meat) mean to you?"

"What does this grading (of beef) mean to you?"

As with many of the questions in this study, multiple responses were permitted. Although 73 percent of the respondents gave answers about the meaning of inspection which correctly identified inspection with wholesomeness, 45 percent related inspection to quality or grading. Conversely, for the grading question, seven in 10 of the respondents made general references to quality characteristics and about three in 10 made specific quality references, but three respondents in 10 related grading to wholesomeness and one in 10 mentioned inspection.

Meaning of inspection:	Percent
Inspection means wholesomeness	73
Assures wholesomeness	54
Assurance meat came from healthy animal	22
Meat was produced under sanitary conditions	8
Inspection means quality or grading	45
Means quality	38
Means grading	9
Don't know	2

	Number
Respondents who said the meat they buy is inspected	715

Meaning of grading:	Percent
Quality characteristics--unspecified	70
Range of quality	42
Assurance of quality	27
Mention of grade names	16
Quality characteristics--specified	28
Tenderness or juiciness	13
Amount of fat	10
Taste or flavor	6
Wholesomeness	31
From healthy animal	26
Beef fresh	6
Price ranges	13
Grading means inspection	12
Don't know	6

	Number
Respondents who said beef is graded	670

In summary, the data presented above suggest that homemakers are indeed confused about inspection and grading. Although virtually all respondents reported that the meat they buy is inspected and that beef is graded, half of the respondents stated that pork is graded; and a considerable number ascribed functions of grading to inspection, and vice versa. A question therefore arises about which statements regarding these functions were made on the basis of knowledge, which were based on assumptions, and which stemmed from misinterpretation--such as may be fostered by the way some stores or packers indicate that the meats they sell are inspected or graded.

Consumer Awareness of Grade Names

Consumers also evidenced considerable confusion about the range of names authorized by the U.S. Department of Agriculture to designate various grades of beef. Respondents were presented with a card listing five correct grade names (USDA Prime to USDA Commercial) and five spurious grade names (USDA #1, #2, Grade A, Grade AA, First Cut). The spurious names were mixed with the true grade names, and the latter were in neither ascending nor descending order. More homemakers selected both true grade names and spurious grade names as ones they were familiar with for beef than selected only true grade names. The grade names most frequently selected were USDA Choice, USDA Prime, and USDA Grade A. The question read:

> "Here is a list of grade labels for beef that might be used in some parts of the country. Are there any on this list that you have seen or heard of?"

Respondents who--

	Percent
Named both true and spurious grades	63
Named true grades only	21
Named spurious grades only	6
Don't know, none of them	10

Grade names selected:

USDA Choice	73
USDA Prime	65
USDA Grade A	62
USDA Good	29
USDA First Cut	23
USDA Standard	19
USDA Grade AA	15
USDA Commercial	14
USDA #1	7
USDA #2	4

	Number
Respondents who said beef is graded	670

Those who named more than one grade were asked:

> "Of the grades of beef you mentioned, which is the top grade?"

True grades were selected as the top grade by about three-fourths of those naming more than one grade of beef. The most frequently named grades were Prime and Choice. Among spurious grades, Grade A received the greatest percentage of mentions.

	Percent
USDA Prime	49
USDA Choice	25
USDA Grade A	16
USDA Grade AA	5
USDA #1	1
USDA First Cut	1
Don't know	3

	Number
Respondents who named more than one grade of beef	571

MEAT FREEZING

Almost nine homemakers in 10 (87 percent) said they sometimes froze fresh meat at home, mainly because it saved shopping, prevented spoilage, and provided the convenience of having meat on hand, ready for use. Beef, chicken, and pork were mentioned most often as meats which were frozen at home.

Even though most homemakers froze meat themselves, little interest was expressed in buying meat already frozen--78 percent flatly rejected the idea. Those who were opposed to buying meat frozen objected primarily because of concern about how long the meat might have been frozen or because of objections to purchasing meat sight unseen. Homemakers who were not opposed to the idea of buying already frozen raw meat generally cited convenience as the reason.

When asked how long meat can be kept frozen, the homemakers who said they freeze meat gave a wide range of answers, as can be seen below. This may reflect in part their opinion of the adequacy of the freezing equipment available to them. A few said that the time varies, depending principally on the kind of meat.

Response to how long meat can be kept frozen	Percent
1 week or less	11
Between 1 and 2 weeks	12
Between 2 and 4 weeks	16
1 to 2 months	8
2 to 3 months	9
3 to 6 months	16
More than 6 months	8
Depends	16
On kind of meat	13
On other factors	3
Don't know, no time mentioned	4
	Number
Respondents	677

About two-thirds of those who reported freezing meat said they usually thawed it completely before cooking it. Most of the others said either that they partially thawed the meat, or that what they did depended on the type or cut of meat or the amount of time available. Very few indicated they generally cooked meat that was completely frozen.

MEAT PREPARATION

Oven Roasting of Pork, Ham, and Lamb

Among respondents who roasted lamb, pork, or ham, about half said they used a moderate oven when roasting. Most of the rest reported slower oven temperatures.

Oven temperature when roasting	Pork	Ham	Lamb
	- - - - Percent - - - - -		
275 degrees or less	5	7	--
300 to 325 degrees	33	33	28
350 to 375 degrees	48	50	56
400 degrees or more	7	4	6
Don't know oven temperature used	7	6	10
	- - - - Number - - - - -		
Respondents roasting meat	461	583	152

Almost all respondents (90 percent) said that they had ovens containing a temperature control or thermostat. About one in seven said that they used a meat thermometer.

Homemakers who roasted lamb were also asked whether they usually served it rare, medium, or well done. The majority (65 percent) reported that lamb was most often served well done. The others were divided almost equally between those who said medium and those who said it was served medium-well done, with only a handful indicating it was served rare.

Outdoor Cooking

Over half of the homemakers (57 percent) reported they had done some outdoor cooking in the 12 months preceding the interview. The meats most favored for outdoor cooking were ground beef, steak, wieners, and chicken.

Meats for outdoor cooking	Percent
Ground beef	83
Steak (beef)	78
Wieners, franks, hot dogs	75
Chicken	64
Spareribs	35
Pork chops	20
Ham or picnic	7

	Number
Respondents who reported doing outdoor cooking	444

New Recipes for Cooking Meat

Out of all the homemakers interviewed, only about one in four had tried any new recipes for meat in the preceding 3 months. These recipes were most frequently obtained from relatives or friends. Other sources cited were magazines, cookbooks, and newspapers. Among those who reported using new recipes, three times as many said the new recipes were for beef or chicken as for pork.

Although relatively few homemakers had tried new recipes, about two-thirds of the homemakers interviewed expressed interest in learning more about cooking specific meats or cuts. Recipes for beef--particularly ground beef--and chicken were the ones said to be of greatest interest and most likely to be tried.

	Meats which homemaker would--	
	Like to learn more about cooking	Be likely to try new recipes for
	Percent	
Pot roast of beef	18	17
Oven roast of beef	15	14
Steak	12	12
Ground beef	23	35
Stew beef	16	19
Chicken	23	32
Lamb	9	8
Bacon	2	2
Ham or picnic	6	7
Smoked pork sausage	2	1
Fresh pork sausage	2	2
Pork roast	8	7
Pork chops	9	10
Spareribs	11	9
All of them	16	9
None of them	36	27

SOME FACTORS AFFECTING THE USE OF MEATS

Consumer studies in the past have shown that beef and chicken have been used in more households, and have been served more frequently, than most pork products or lamb. Preliminary results of this study indicate that this is still true. This section will investigate some possible explanations underlying consumer preferences and usage patterns.

Importance of Selected Characteristics in Meat Purchasing

Respondents were presented with a card on which 14 pairs of attributes which they might believe are characteristic of specific meats, positively and negatively stated, were listed. Precautions were taken to insure against positive/negative order bias in the listing.

The respondents were asked to characterize four meats (beef, ham or picnic, pork, and chicken) according to these attributes. Then, the respondents were asked:

> "Which of these ideas are especially important to you when you are considering which meats to buy?"

Respondents were not limited in the number of statements they could select and could choose either the positive or the negative alternative, both, or neither. Generally, they did not select the negative alternatives.

Summary descriptions of the statements are used in the text. Verbatim wording of the items and percentages of respondents selecting each are shown in the tabulations which follow.

Even though a particular attribute wasn't selected by a large percentage of homemakers as especially important, it does not follow that the attribute is of no interest to respondents. It may be that it was simply taken for granted. An example is the statement "always safe to eat," which was not reported as especially important by a large percentage of respondents. It is likely that this occurred because people assume the meats they are accustomed to purchasing are safe. Any event, such as an outbreak of food poisoning, that would alter this opinion would probably cause this idea to be mentioned much more frequently. However, the fact that these results should not be interpreted literally does not diminish their value, since the assumptions consumers make are of interest in an assessment of attitudes. With these cautions in mind, the results are presented below.

According to homemakers' reports, quality, flavor, little waste, and healthfulness were quite important in deciding which meats to purchase. Items related to these four concepts were selected by half or more of all respondents as being especially important when considering meat purchases.

	Percent
Sure of good quality	64
Not sure of good quality	*
Tasty	58
Not tasty	1/---
Not too much waste	50
Too much waste	1
Healthful to eat	49
Not healthful to eat	---

* Less than 1 percent.
1/ Zero in this sample.

The following reasons--many of them health-related--appeared to be moderately important; they were selected by two to four respondents in 10.

	Percent
Many different ways to cook	40
Not many different ways to cook	1
Easy to digest	36
Hard to digest	*
Always safe to eat	34
Not always safe to eat	*

Continued..

	Percent
Keeps well before cooking	32
Does not keep well before cooking	*
Don't get tired of	29
Get tired of	1
High in protein	26
Low in protein	1
High in vitamins and minerals	24
Low in vitamins and minerals	--

The remaining three ideas appeared to be minor considerations in meat buying; they were selected by fewer than one-fifth of all respondents.

	Percent
Good for people who are watching their weight	17
Not good for people who are watching their weight	*
Good to eat cold	16
Not good to eat cold	1
Low in cholesterol	11
High in cholesterol	3

COMPARISON OF SPECIFIC MEATS IN RELATION TO SELECTED CHARACTERISTICS

As mentioned previously, respondents were asked to select among 14 pairs of ideas those they considered to be especially important in meat purchasing. Before the question on importance was asked, respondents were handed a card with the 14 pairs of ideas written on it, and asked:

> "This card has some phrases on it which some people think are true about certain meats--which of these describe your opinions about beef?...Any others?"

The question was repeated for ham or picnics, pork, and for chicken. Respondents were asked to characterize the four meats, whether or not they were familiar with all of them. Results for the four meats appear in Table 2, page 25.

It should be remembered that many of the responses may not be independent of factors such as the family's level of usage of familiarity with a given meat. It is also likely that a homemaker's general reaction to a meat influences her reactions to some of the specific statements about that meat. If, for example, a homemakers is favorably oriented toward beef in general,

she may be more apt to mention specific favorable characteristics for beef. On the other hand, homemakers who feel generally negative toward fresh pork may be more inclined to associate unfavorable statements with this meat.

Let us compare the opinions expressed about the meats studied in relation to the two attributes that were most often mentioned by homemakers as especially important in meat purchasing--assurance of good quality (64 percent) and tastiness (58 percent).

Beef and chicken were more often said to possess consistently good quality than ham or fresh pork. However, none of the four meats was associated with assurance of good quality by as many respondents as considered this attribute especially important in meat purchasing. This would seem to indicate a lack of confidence or knowledge on the part of many homemakers about the measures currently being taken to provide them with meats of consistent and recognizable quality.

	Homemakers who said, "Sure of good quality"
	- - - - Percent - - - -
Beef	43
Chicken	38
Ham or picnics	30
Pork	22

On the other hand, although beef and chicken were the meats most often considered tasty by respondents, all four meats were considered tasty by at least as many homemakers as stated this attribute to be especially important when selecting meats to buy.

	Homemakers who said, "Tasty"
	- - - Percent - - - -
Beef	77
Chicken	76
Ham or picnics	65
Pork	59

On most of the other attributes, both beef and chicken fared very well, while ham and fresh pork did not. Beef was most often characterized, in addition to being tasty, as: easy to digest, a meat that can be cooked in many ways, healthful to eat, a meat one doesn't tire of quickly, with relatively little waste, and high in protein. Moreover, beef was said to possess negative attributes by very few homemakers.

Chicken, like beef, was often described as tasty, easily digestible, and a meat that can be prepared in many ways. It was also considered good to eat cold, outdoing beef in this respect. Chicken was criticized by some, however,

as perishable before cooking; and fewer homemakers thought chicken has a high protein or vitamin and mineral content than claimed this attribute to be characteristic of beef.

Ham was generally acknowledged to be tasty, good to eat cold (equaling chicken in this respect), and a meat that keeps well before cooking. It also has a moderately favorable image from the standpoint of quality, waste, and healthfulness, and protein, vitamin, and mineral content. The negative opinions which stood out in the image of ham were that it is not a good choice for people watching their weight and is high in cholesterol content. The other statements which came up on the negative list for ham with some frequency--but on which opinions were more likely to be divided than clearly negative--included digestibility, tiresomeness, variety of ways to cook, and whether it is always safe to eat.

The one favorable attribute which respondents ascribed to pork was that it is tasty. And although pork was not noted frequently as having a high protein or vitamin and mineral content, neither was it criticized on these two items by many respondents. It was viewed unfavorably by a number of respondents on health-related statements concerning digestibility, appropriateness for weight watchers, being safe to eat, and having a high cholesterol content. The one health item on which opinions were divided was the general statement "healthful to eat." Pork also scored poorly on factors such as keeping well before cooking, containing little waste, and being good to eat cold.

Comparison of Specific Cuts of Meat for Suitability of Serving in Selected Circumstances

Another method of investigating factors which may help to explain meat purchasing behavior involved determining homemakers' opinions about the suitability of specific meats or cuts for the main meal of the day under selected circumstances.

A visual aid card for respondents was prepared displaying the following list:

A pot roast of beef--one that is generally cooked in a covered pot

An oven roast of beef--one that is generally cooked in the oven

Steak (beef such as sirloin, T-bone, ribsteak or round steak)

Ground beef

Stew beef

Chicken

Lamb

Ham or picnic

Pork roast

Pork chops

Spareribs

Wieners, franks, hot dogs

The questions they were asked read:

> "There are meats which some people would serve at the main meal for certain situations, and other meats which they would NOT serve for these situations. (Hand Respondent Card)
> "Which of these meats do you think would be especially good for a warm weather meal for your family?" "Any others?"
> "Which do you think would NOT be especially good for a warm weather meal for your family?" "Any others?"

The series continued by asking which of the meats would be especially good and which would NOT be especially good under the following circumstances:

> "...if you want to serve an inexpensive meal?"
> "...if you want to serve an easy-to-prepare meal?"
> "...when special guests are coming to eat?"
> "...when you are not sure which meats your guests like?"

Respondents were encouraged to name as many meats as they wished by the question, "any others?"

Each question in this group was designed to meet specific objectives. For example, the next-to-last item listed above investigated the prestige or lack of prestige associated with serving specific meats, while the last item was directed at the breadth of appeal of the meats included on the list presented to respondents. Responses to these questions are shown in Table 3, page 26.

Ground beef and wieners were chosen most frequently for easy-to-prepare meals; stew beef, beef and pork roasts, and spareribs were the meats most likely to be rejected by homemakers for this situation.

For warm-weather meals, chicken, wieners, ground beef, steak, and ham were all viewed favorably; beef roasts, stew beef, and all types of fresh pork were thought not to be especially good for summertime use.

Ground beef, chicken, and wieners took the honors for inexpensive meals; beef steak and oven roast were disqualified by large numbers of respondents on this score. The opinions of respondents about the prestige value of meats were about as one might expect: Oven roast of beef and steak were the most popular choices for special guests, followed by chicken and ham; meats relegated to the "everyday" category were wieners, ground beef, and stew beef. The pattern of choices for meals when guests' preferences are not known was similar, but there were some interesting variations; chicken's relative position improved, while the other three favored meats lost ground. Ground beef, stew beef, and wieners were named as poor choices by fewer respondents; while the proportions doubting the advisability of serving lamb and all the fresh pork cuts listed to guests with unknown preferences were substantially higher.

Ground beef was characterized as an inexpensive meat, suitable for serving in warm weather, and easy to prepare. However, it seemed to lack prestige since it was rejected by virtually all homemakers for meals served to special guests. Although it was not considered desirable for guests whose preferences were unknown, neither was it rejected for this situation by a sizable number of homemakers.

Steak was characterized as a prestige meat, suitable for warm weather, and likely to please most tastes. However, it was considered expensive, and although it was not viewed by most as difficult to prepare, steak appeared not to be a particularly easy-to-prepare meat for some people.

Roasts of beef, both oven and pot, were relegated to use during cooler weather. Neither was seen as easy to prepare. Oven roast rated well for special guests and when preferences were unknown--two situations in which pot roasts did not score well. An oven roast of beef was also said to be expensive, whereas most consumers expressed no opinion about the relative cost of pot roast.

Stew beef was chosen less often, in most instances, than other forms of beef as possessing or not possessing a particular characteristic. This appears to reflect a lower degree of familiarity than was enjoyed by other types of beef. It was more often said to be inexpensive than not. However, stew beef had no prestige value, and it seems to be a meat with which consumers felt less assurance than other types of beef, judging by the more negative than positive reactions to the questions on ease of preparation and for serving when guests' preferences are not known.

In short, for each of the five situations suggested, at least one type of beef was said to be especially good by more than half of the respondents. A type of beef was the most frequently cited as good for three of the situations; for the other two, it was a close second in total mentions to the type of meat chosen most often.

Overall, chicken was rated second only to beef, and the generally held opinion that chicken is inexpensive did not tend to give this food low prestige connotations. It was considered good for special guests, and for guests whose preferences are unknown. Chicken was also said to be especially good in warm weather. Although some homemakers felt that chicken is especially good as an easy-to-prepare meat, a sizable number felt that chicken is not a particularly good meat in this situation.

Ham or picnic was mentioned as especially good to serve in warm weather or when special guests were expected, as well as for an easy-to-prepare meal. However, homemakers did not see these meats as particularly economical and were somewhat divided about whether ham or picnics should be served to guests whose meat preferences are not known.

Fresh pork projected a poor profile. With the exception of pork chops, which were considered easy to prepare by 21 percent of the homemakers and difficult by 9 percent, the pork cuts listed were mentioned favorably for the various situations by only 5 to 13 percent of the respondents, while drawing unfavorable mention from 13 to 60 percent of the respondents. The most prevalent negative comments on pork were for use in warm weather and for meals to guests whose preferences are not known.

SUMMARY PROFILES OF SELECTED MEATS

Combining the survey findings for beef, chicken, pork, and ham from the two types of "image" questions, we find that beef was characterized by consumers as tasty, easily digested, versatile, healthful, providing little waste, and not being tiresome. Part of the versatility attributed to beef appears to derive from the number of different types available, each of which satisfies different needs. Ground beef was considered inexpensive; steak and oven roasts seem to satisfy prestige desires and are likely to be acceptable when served to guests whose preferences are unknown; ground beef and steak were seen as easy to prepare and suitable for serving in warm weather. Few negative characteristics were attributed to beef, the most widely used of the meats studied, although steak and oven roasts were characterized as expensive.

The image of chicken, which was used in almost as many households as beef, although not quite as frequently, generally mirrored the image of beef. Homemakers found fault, however, with its keeping qualities when raw.

In contrast with the widespread and frequent use of beef and chicken reported by homemakers, ham and pork (except bacon) were used in fewer homes and far less frequently. Neither ham nor pork achieved as favorable an image as beef or chicken. Both were said to be tasty, and ham was credited with keeping well, being good when served cold, and suitable for serving in warm weather and to special guests. However, neither ham nor pork was considered inexpensive, versatile, particularly healthful, or good for weight-watchers, and both were considered high in cholesterol. In addition, pork was considered difficult to digest, not always safe to eat, a meat that does not keep well before cooking, and one that is unsuitable to serve in warm weather. It was also said to have too much waste and to be unsuitable for special guests. And although respondents themselves characterized pork as tasty, they were unsure that most people like it, as evidenced by their reaction to the idea of serving it to guests whose preferences are not known.

Table 1.--Meats reported served by homemakers during the past 12 months

Meats served	Homemakers reporting meats served during past 12 months
	Percent
Beef	*99
Ground	98
Steak	95
Stew	82
Oven roast	80
Pot roast	76
Chicken	98
Bacon	94
Fresh pork	91
Pork chops	78
Spareribs	62
Pork roast	59
Smoked or cured pork	87
Ham or picnic	78
Canned ham	50
Veal	37
Lamb	28
Other meat products:	
Wieners, franks, hot dogs	91
Cold cuts	87
Lunch meat (ham)	74
Fresh pork sausage	68
Smoked pork sausage	47

* Only 3 respondents said they did not serve beef during the 12 months prior to the interview.

Table 2.--Selected characteristics that homemakers associate with beef, ham, pork, and chicken

Characteristics	Beef	Ham (or picnics)	Pork	Chicken
	Percent			
Easy to digest	70	30	16	69
Hard to digest	2	22	44	1
Sure of good quality	43	30	22	38
Not sure of good quality	6	12	19	9
Keeps well before cooking	46	44	16	27
Does not keep well before cooking	5	7	32	22
Don't get tired of	66	28	26	52
Get tired of	9	28	24	19
Low in cholesterol	18	3	2	17
High in cholesterol	5	20	25	4
Good to eat cold	45	64	21	63
Not good to eat cold	16	6	31	9
Many different ways to cook	69	30	28	64
Not many different ways to cook	3	17	19	5
High in protein	53	24	22	29
Low in protein	1	4	3	4
Not too much waste	62	36	20	55
Too much waste	4	22	29	8
High in vitamins and minerals	35	20	18	22
Low in vitamins and minerals	2	3	4	3
Tasty	77	65	59	76
Not tasty	1	3	4	1
Always safe to eat	47	24	13	37
Not always safe to eat	3	16	35	9
Good for people who are watching their weight	50	7	4	44
Not good for people who are watching their weight	1	29	37	3
Healthful to eat	68	33	25	54
Not healthful to eat	*	7	18	1
None of these, don't know	1	5	5	1

*Less than 1 percent.

Table 3.--Homemakers' reactions to specific meats for use in selected situations

Meat	Warm weather meal		Inexpensive		Easy to prepare		Special guests		Not sure of guests' preferences	
	Good	Not good	Good	Not good	Good	Not good	Good	Not good	Good	Not good
	Percent									
Pot roast	15	32	15	14	18	35	15	10	15	7
Oven roast	18	42	4	48	24	36	62	1	51	2
Steak	54	3	1	82	34	14	57	5	41	2
Ground beef	61	2	72	1	59	2	4	45	7	13
Stew beef	7	37	23	5	11	23	2	36	3	16
Chicken	69	3	66	1	37	18	43	4	46	8
Lamb	6	16	1	22	3	12	6	20	1	53
Ham or picnic	46	10	5	29	30	14	34	4	20	15
Pork roast	3	60	3	23	8	27	11	13	3	44
Pork chops	13	38	2	28	21	9	7	15	3	28
Spareribs	12	32	5	14	5	26	4	27	1	37
Wieners, franks, hot dogs	61	4	48	3	60	1	1	72	1	32
None of them	1	6	2	1	*	12	*	4	1	4
Don't know, no answer	*	1	*	1	*	1	1	2	1	2

*Less than 1 percent.

UNITED STATES DEPARTMENT OF AGRICULTURE
WASHINGTON, D.C. 20250

OFFICIAL BUSINESS

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF AGRICULTURE